

1. Describe the practice proposed for recognition, and list its objectives. Detail how the practice is innovative, how it promotes high student achievement and how it can be replicated.

***How do you enrich time honored curriculum?...Take third graders beyond the walls of the classroom?...Excite teachers to explore the possibilities of new technology?***

***Look through a butterfly's eye!***

At first glance this may not seem feasible, however, in our school district, it is a possibility. Our third graders have studied the Monarch butterfly and its flight pattern to Mexico for several years. They have invited the caterpillars into the classroom, watched them build their chrysalis, and emerge as butterflies. Much time and effort has been devoted to activities that teach about the butterfly and its migration. This year, however, there was change in the air.

***What change enabled students to take a butterfly's view of the world?...Technology!***

Teachers in our district had a computer in their classroom with access to the Internet. The district's Technology Plan included these capabilities for all classes. Teachers were being trained to use the technology, and everyone was working together to adjust to the new system. Obviously there was much excitement, however, there was also trepidation.

***How were teachers encouraged to use the full capabilities of technology?...They had a vision!***

State of the art technology was available, but teachers with a vision were the district's main asset. They were excited about the possibilities of technology and willing to share their vision. They asked questions and made a plan that gave directions to others. They worked as a team to give students flight...and as they soared, they touched the district and community with the flutter of their wings.

***How did they establish connections to take the students beyond the classroom?...Network!***

Teachers took the time-honored curriculum of the Monarch butterfly, brought it to life with the Internet to link third grade students with students in Pacific Grove, California, whose culture celebrates the Butterfly. They shared pictures of the beginning of the Monarch's journey in New Jersey, and received information about what the butterfly was seeing in California. Teachers also linked the third grade students with eighth grade students taking Spanish. The teachers organized class visits with the eighth graders who provided information about the butterfly's view of Mexico. Eighth graders prepared Hyperstudio presentations to teach about the language, culture, and climate of Mexico. The students celebrated their partnership with a "Fiesta Day!" and shared research with the community on the district web page.

***Where did this all begin?...Training....Curiosity!***

Teachers received corporate funding to buy additional multi-media equipment for the project. They learned to use scanners, digital and video cameras, e-mail, and the Internet to expand the curriculum. They trained students to use the equipment to reach beyond the walls of the classroom. As other teachers became aware of the "butterfly's view," they discovered what the current technology could offer for their classrooms. Additional training for the multimedia technology was scheduled in the district staff development program. Assistance was offered to other teachers interested in enriching their curriculum.

"Through A Butterfly's Eye" allowed our students to expand their knowledge to situations in the real world. By establishing partnerships across town, across the country, and across our national border, all involved viewed the journey from start to finish through many aspects of technology. We were able to accomplish the following objectives:

- Train relevant staff members to utilize multimedia technology.
- Establish partnerships with Robert Down Elementary School in Pacific Grove, CA.
- Establish partnerships with the third grade students and eighth grade students.
- Expose third grade students to the language, culture, and climate of Mexico.
- Train students in grade three to use the Internet including E-mail.
- Train students in third and eighth grade to use Hyperstudio for presentations.
- Provide information about the project to the community on the district web page.

Teachers and students saw their vision become a reality at their culminating activity, "Fiesta Day!" As the third and eighth graders shared the dance, music, drama, and food of Mexico, they celebrated their expanded view of the world as seen "Through A Butterfly's Eye."

2. Describe the educational needs of students that the practice addresses and how they were identified. List the *Core Curriculum and/or Workplace Readiness Standards* addressed by the practice and describe how the practice addresses the standard(s).

The students of our third grade class, the class of 2007, must be prepared for the world of the twenty-first century. As educators it is of utmost importance that we provide these students with skills to compete in a technological society. They must enter the workplace of 2007-2012 with technology integrated into their lives. It is imperative that we begin that integration now. They must also be prepared with the workplace readiness skills that provide them with self-management skills to work with the diverse population they will encounter as technology links the corners of the world. The New Jersey Core Curriculum Content Standards have provided a guide for educators to prepare these students for the twenty-first Century.

An exciting aspect of the program was the integration of many different academic content areas into the activities. Teachers were also able to incorporate the Cross Content Workplace Readiness Standards for technology and self-management into the program.

2. **All students will use information, technology, and other tools.** All students in the program were provided with an understanding of how the technological systems functioned. They used technology for special activities, searching the Internet for information about the butterfly and Mexico, communicating with E-mail, preparing a presentation for a group of students. After they had completed the unit they were aware of the use of technology for gathering information and bringing them closer to other parts of the world.
3. **All students will demonstrate self-management skills.** As students in third and eighth grades worked on their respective projects, they were restricted by time. They had to set short and long-term goals to accomplish their tasks. They worked in cooperative groups to prepare their presentations and to communicate by E-mail. They provided constructive feedback to each other before presenting to the group.

The program had traditionally been taught in the Science curriculum and addressed the following standards:

- 5.3 **All students will develop problem-solving, decision making, and inquiry skills, reflected by formulating usable questions and hypothesis, planning experiments, conducting systematic observations, interpreting and analyzing data, drawing conclusions, and communicating results.**
- 5.8 **All students will gain an understanding of the structure, characteristics, and basic needs of organisms.**
- 5.9 **All students will investigate the diversity of life.**

By tracing the migration of the butterfly, Social Studies was incorporated into the program and standard 6.7 was addressed (**Students will acquire geographical understanding by studying the world in spatial terms.**). The preparation for Fiesta Day offered teachers an opportunity emphasize Language Arts Literacy Standards 3.1 (**Students will speak for a variety of purposes.**) and 3.2 (**Students will listen actively in a variety of situations.**). The project also incorporated standards from the Visual and Performing Arts 1.3 (**Students will utilize arts elements and arts media to produce artistic products and performance.**) and World Languages 7.2 (**All students will be able to demonstrate an understanding of the interrelationship between the language and culture of at least one world language.**).

The opportunity to integrate these standards into the program assisted the teachers as they helped our students prepare themselves to be the citizens of the twenty-first century.

3. Document the assessment measures used to determine the extent to which the objectives of the practice have been met.

One measure of success for *“Through A Butterfly’s Eye”* was a series of pre- and post-tests that addressed the different aspects of the project. The students were given a pre-test to assess their knowledge of the Monarch Butterfly, culture of Mexico, and technology. This test was given before the teachers introduced the unit, and a post-test was administered after each component of the project was completed. Students increased their scores by an average of 20%.

The students in eighth grade were evaluated on the Hyperstudio presentations that were presented to the third grade students on **Fiesta Day**. They were evaluated on their use of the new technology as well as their presentation techniques.

Teachers also demonstrated success in their development of new technological skills by documenting on a checklist when they had completed e-mail, searched on the Internet, used multimedia technology in the classroom, and taught students to use the new technology.

Success of our partnership with the Robert Down Elementary School in Pacific Grove California was documented with a log of e-mail communication between the classrooms. The partnership will continue throughout the school year to allow students to discuss other areas of interest expressed in the communication such as the Grey Whale that migrates to the Monterey Bay and the fact that the students in New Jersey will have snow during the winter.

Another important measure of success with the project was the training of other teachers to use the multi-media equipment. The project provided a view of the possibilities that technology offered in the classroom. Teachers were able to turn-key their skills and provide support and encouragement for teachers who were interested in similar activities for their classroom.

The greatest measure of success was the culminating activity for the project, **Fiesta Day**. The event required district cooperation of staff including custodial workers, cafeteria workers, art teachers, media specialists, technology coordinators, teachers, parents, students, and administrators. As we celebrated the students’ success, we were able to experience their expanded-view of the world as they shared their knowledge of the Monarch Butterfly, the culture of Mexico, and the multimedia technology.